

Having described the invention, the following is claimed:

1. A method of anchoring a suture, said method comprising the steps of forming an anchor of body tissue, said step of forming an anchor of body tissue includes forming a passage in the body tissue, inserting a suture into the passage formed in the body tissue, and positioning the anchor formed of body tissue in a patient's body with the suture extending into the passage.

2. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming the anchor of osseous body tissue.

3. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming an anchor of dried body tissue, said step of positioning the anchor formed of body tissue in a patient's body includes positioning the anchor at a location in the patient's body where the dried body tissue of the anchor is exposed to body fluid to enable the dried body tissue of the anchor to absorb body fluid.

4. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming the anchor of body tissue which includes collagen.

5. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming the anchor of interarticular fibrocartilage.

6. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming the anchor from body tissue removed from the body of the patient, said step of positioning the anchor formed of body tissue in the patient's body includes positioning the anchor in the body of the patient from whom the body tissue forming the anchor was removed.

7. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming the anchor from body tissue removed from a first human, said step of positioning the anchor formed of body tissue in a patient's body includes positioning the anchor in the body of a second human.

8. A method as set forth in claim 1 wherein said step of forming an anchor of body tissue includes forming the anchor from body tissue removed from an animal other than a human, said step of positioning the anchor formed of body tissue in a patient's body includes positioning the anchor in the body of a human.

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9. A method as set forth in claim 1 wherein said step of forming a passage in the body tissue includes moving a thin elongated member into the body tissue, said step of forming an anchor of body tissue includes moving a cutting tool along the thin elongated member and cutting the body tissue with the cutting tool while moving the cutting tool along the thin elongate member.

10. A method as set forth in claim 9 wherein said step of forming a passage in the body tissue further includes removing the thin elongated member from the body tissue after moving the cutting tool along the thin elongated member and cutting the body tissue with the cutting tool.

11. A method as set forth in claim 1 wherein said step of forming a passage in body tissue includes compacting body tissue around a member, and thereafter, removing the member from the body tissue compacted around the member.

12. A method as set forth in claim 1 wherein said step of positioning the anchor formed of body tissue in a patient's body with the suture extending into the passage includes moving the anchor formed of body tissue into the patient's body, and, thereafter pivoting the anchor relative to the patient's body.

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13. A method as set forth in claim 12 wherein said step of pivoting the anchor includes tensioning the suture to apply force to the anchor.

14. A method of anchoring a suture, said method comprising the steps of inserting a thin elongated member into osseous tissue, moving a cutting tool axially along the thin elongated member into engagement with the osseous tissue at a location spaced from the thin elongated member and extending around a portion of the thin elongated member, moving the cutting tool into the osseous tissue by cutting the osseous tissue with the cutting tool while continuing to move the cutting tool axially along the thin elongated member, said step of moving the cutting tool into the osseous tissue includes guiding movement of the cutting tool into the osseous tissue with the thin elongated member, separating a portion of the osseous tissue having an outer side surface formed by the cutting tool from the remainder of the osseous tissue, removing the thin elongated member from the osseous tissue to leave a passage at the location where the thin elongated member was inserted into the osseous tissue, inserting a suture into the passage in the osseous tissue, and inserting at least part of the portion of the osseous tissue having an outer side surface formed by the cutting tool and a portion of the suture into a patient's body with the suture extending into the passage in the osseous tissue.

15. A method as set forth in claim 14 further including the steps of tensioning the suture to transmit force from the suture to the osseous tissue having an outer side formed by the cutting tool, and transmitting force from the osseous tissue having an outer side formed by the cutting tool to the patient's body to retain a portion of the suture in the patient's body.

16. A method as set forth in claim 14 wherein said step of inserting a thin elongated member into osseous tissue includes inserting the thin elongated member into osseous tissue in the patient's body, said step of moving a cutting tool axially along the thin elongated member into engagement with the osseous tissue includes moving the cutting tool into engagement with osseous tissue in the patient's body, said step of separating a portion of the osseous tissue from the remainder of the osseous tissue includes removing the osseous tissue from the patient's body.

17. A method as set forth in claim 14 wherein said step of inserting a thin elongated member into osseous tissue includes inserting the thin elongated member into osseous tissue which is spaced from the patient's body, said step of moving a cutting tool axially along the thin elongated member into engagement with the osseous tissue

includes moving the cutting tool into engagement with the osseous tissue which is spaced from the patient's body.

18. A method as set forth in claim 14 wherein said step of inserting a thin elongated member into osseous tissue includes rotating the thin elongated member about a longitudinal axis of the thin elongated member while pressing an end of the thin elongated member against the osseous tissue.

19. A method as set forth in claim 14 wherein said step of cutting the osseous tissue with the cutting tool includes rotating the cutting tool about a longitudinal axis of the thin elongated member.

20. A method as set forth in claim 14 further including cutting the portion of the osseous tissue separated from the remainder of the osseous tissue into a plurality of segments each of which has an outer side surface formed by the cutting tool, said step of inserting a suture into the passage in the osseous tissue includes inserting a suture through one of the segments of osseous tissue.

21. A method as set forth in claim 14 wherein said step of inserting a suture into the passage in the osseous tissue includes inserting the suture through the passage so

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that a first portion of the suture extends to a first end of the passage in the osseous tissue and a second portion of the suture extends from a second end of the passage in the osseous tissue, said step of inserting the portion of the osseous tissue having an outer side surface formed by the cutting tool and a portion of the suture into a patient's body is performed with the first and second portions of the suture extending from one side of a location where the portion of the osseous tissue is inserted into the patient's body to the first and second ends of the passage in the osseous tissue.

22. A method of anchoring a suture, said method comprising the steps of forming a piece of bone to have first and second end portions, an outer side surface extending between said first and second end portions, and a passage extending through the piece of bone, inserting a suture into the passage in the piece of bone, and inserting the piece of bone into body tissue with the first end portion of the piece of bone leading and with the suture extending from the passage in the piece of bone, said step of inserting the piece of bone into the body tissue includes applying force against the second end portion of the piece of bone.

23. A method as set forth in claim 22 wherein said step of forming a piece of bone includes inserting a thin

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elongated member into a body of bone of a size which is substantially larger than the size of the piece of bone, moving a cutting tool axially along the thin elongated member into the body of bone and cutting the body of bone with the cutting tool to form the outer side surface of the piece of bone as the cutting tool is moved into the body of bone.

24. A method as set forth in claim 23 wherein said step of forming a piece of bone includes disengaging the thin elongated member from the bone to leave a passage in the bone.

25. A method as set forth in claim 23 wherein the body of bone is spaced from a patient, said step of inserting the piece of bone into body tissue includes inserting the piece of bone into the patient's body.

26. A method as set forth in claim 23 wherein the body of bone is disposed in a patient's body, said step of inserting a thin elongated member into a body of bone includes inserting the thin elongated member into the patient's body, said step of forming a piece of bone includes removing bone from the patient's body, said step of inserting the piece of bone into body tissue includes inserting the piece of bone into the patient's body.

28. A method as set forth in claim 22 wherein said step of forming a piece of bone is at least partially performed with the piece of bone in a first patient's body, said step of inserting the piece of bone into body tissue includes inserting the piece of bone into a second patient's body.

29. A method as set forth in claim 22 wherein said step of forming a piece of bone includes cutting bone of an animal other than a human, said step of inserting the piece of bone into body tissue includes inserting the piece of bone into a human patient's body.

30. A method as set forth in claim 22 wherein said step of forming a piece of bone includes compressing a mixture of bone particles and a fibrinous binder.

31. A method as set forth in claim 22 wherein said step of forming a piece of bone includes rotating a cutting tool and moving the cutting tool into bone along a path

which extends parallel to an axis about which the cutting tool is rotated to at least partially form the outer side surface of the piece of bone.

32. A method as set forth in claim 31 wherein said step of forming a piece of bone includes rotating a thin elongated member and moving the thin elongated member into bone along a path which extends parallel to an axis about which the thin elongated member is rotated to at least partially form the passage which extends through the piece of bone.

33. A method as set forth in claim 32 wherein said steps of rotating a cutting tool and moving the cutting tool into bone and said steps of rotating a thin elongated member and moving the thin elongated member into bone are performed together.

34. A method as set forth in claim 32 wherein said steps of rotating a cutting tool and moving the cutting tool into bone are performed after performance of said step of rotating a thin elongated member and moving the thin elongated member into bone.

35. A method as set forth in claim 22 wherein said step of forming a piece of bone includes forming a piece of bone which is at least partially dried, said step of

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inserting the piece of bone into body tissue includes positioning the piece of bone in body tissue at a location where the piece of bone is exposed to body fluid to enable the piece of bone to absorb body fluid.

36. A method of anchoring a suture, said method comprising the steps of forming a piece of dense connective body tissue to have first and second end portions, an outer side surface extending between said first and second end portions, and a passage extending through the piece of dense connective body tissue, inserting a suture into the passage in the piece of dense connective body tissue, and inserting the piece of dense connective body tissue into a patient's body with the first end portion of the piece of dense connective body tissue leading and with the suture extending from the passage in the piece of dense connective body tissue, said step of inserting the piece of dense connective body tissue into the patient's body includes applying force against the second end portion of the piece of dense connective body tissue.

37. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes compressing dense connective body tissue to form a sheet having a thickness corresponding to the distance between opposite ends of the piece of dense connective body tissue, cutting a portion from the sheet of dense

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connective body tissue to at least partially form the outer side surface of the piece of dense connective body tissue, and inserting a thin elongated member into the dense connective body tissue to at least partially form the passage.

38. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes cutting dense connective body tissue of an animal other than a human, said step of inserting the piece of dense connective body tissue into a patient's body includes inserting the piece of dense connective body tissue into a human patient's body.

39. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes rotating a cutting tool and moving the cutting tool into dense connective body tissue along a path which extends parallel to an axis about which the cutting tool is rotated to at least partially form the outer side surface of the piece of dense connective body tissue.

40. A method as set forth in claim 39 wherein said step of forming a piece of dense connective body tissue includes rotating a thin elongated member and moving the thin elongated member into dense connective body tissue along a path which extends parallel to an axis about which

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the thin elongated member is rotated to at least partially form the passage which extends through the piece of dense connective body tissue.

41. A method as set forth in claim 40 wherein said steps of rotating a cutting tool and moving the cutting tool into dense connective body tissue and said steps of rotating a thin elongated member and moving the thin elongated member into dense connective body tissue are performed together.

42. A method as set forth in claim 40 wherein said steps of rotating a cutting tool and moving the cutting tool into dense connective body tissue are performed after performance of said step of rotating a thin elongated member and moving the thin elongated member into the dense connective body tissue.

43. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes forming a piece of dense connective body tissue which is at least partially dried, said step of inserting the piece of dense connective body tissue into a patient's body includes positioning the piece of dense connective body tissue in the patient's body at a location where the piece of dense connective body tissue is exposed to body

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fluid to enable the piece of dense connective body tissue to absorb body fluid.

44. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes removing cartilage from the patient's body.

45. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes removing at least a portion of the tendon from the patient's body.

46. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue includes placing the dense connective body tissue in a press, and operating the press to apply pressure against the dense connective body tissue in the press to shape the dense connective body tissue in the press during operation of the press.

47. A method as set forth in claim 46 wherein said step of forming a piece of dense connective body tissue further includes cutting the dense connective body tissue shaped by operation of the press to at least partially form the passage.

48. A method as set forth in claim 46 wherein said step of forming a piece of dense connective body tissue further includes cutting the dense connective body tissue shaped by operation of the press to further shape the piece of dense connective body tissue.

49. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue to have a passage includes piercing dense connective body tissue to at least partially form the passage.

50. A method as set forth in claim 36 wherein said step of forming a piece of dense connective body tissue to have an outer side surface includes moving a cutting tool along a linear path to cut dense connective body tissue and at least partially form the outer side surface of the piece of dense connective body tissue.

51. A method as set forth in claim 50 wherein said step of forming a piece of dense connective body tissue further includes piercing dense connective body tissue to at least partially form the passage.

52. A method of anchoring a suture, said method comprising the steps of forming a piece of dried body tissue to have a passage extending through the piece of dried body tissue, inserting a suture into the passage in

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the piece of dried body tissue, and inserting the piece of dried body tissue into a patient's body at a location where the piece of dried body tissue is exposed to fluid in the patient's body to enable the piece of dried body tissue to expand by absorbing fluid from the patient's body.

53. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes compressing body tissue to remove fluid from the body tissue.

54. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes compressing body tissue to form a sheet having a thickness corresponding to the distance between opposite ends of the piece of dried body tissue, cutting a portion from the sheet of dried body tissue to at least partially form an outer side surface of the piece of dried body tissue, and inserting a thin elongated member into the dried body tissue to at least partially form the passage.

55. A method as set forth in claim 36 wherein said step of forming a piece of dried body tissue includes cutting body tissue of an animal other than a human, said step of inserting the piece of dried body tissue into a patient's body includes inserting the dried piece of body tissue into a human patient's body.

56. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes rotating a cutting tool and moving the cutting tool into dried body tissue along a path which extends parallel to an axis about which the cutting tool is rotated to at least partially form an outer side surface of the piece of dried body tissue.

57. A method as set forth in claim 56 wherein said step of forming a piece of dried body tissue includes rotating a thin elongated member and moving the thin elongated member along a path which extends parallel to an axis about which the thin elongated member is rotated to at least partially form the passage which extends through the piece of dried body tissue.

58. A method as set forth in claim 57 wherein said steps of rotating a cutting tool and moving the cutting tool into the dried body tissue and said steps of rotating a thin elongated member and moving the thin elongated member into dried body tissue are performed together.

59. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes removing tissue from the patient's body and drying the tissue removed from the patient's body.

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60. A method as set forth in claim 59 wherein said step of removing tissue from the patient's body includes removing skin from the patient's body.

61. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes placing body tissue in a press, and operating the press to apply pressure against the body tissue in the press during operation of the press.

62. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes moving a cutting tool along a linear path to cut dried body tissue and at least partially form an outer side surface of the piece of dried body tissue.

63. A method as set forth in claim 62 wherein said step of forming a piece of dried body tissue further includes piercing dried body tissue to at least partially form the passage.

64. A method as set forth in claim 52 wherein said step of forming a piece of dried body tissue includes providing freeze dried body tissue and cutting the freeze dried body tissue to at least partially form an outer side surface of the piece of dried body tissue.

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65. An apparatus comprising a suture anchor, said suture anchor including a tubular wall formed of body tissue, said tubular wall having first and second axially opposite end portions formed of body tissue, said tubular wall having an outer side surface means formed of body tissue for engaging a patient's body tissue, said tubular wall having inner side surface means formed of body tissue for defining a passage which extends through said anchor and between said first and second end portions of said tubular wall, and suture means for extending into the patient's body tissue and through said passage in said tubular wall.

66. An apparatus as set forth in claim 65 wherein said tubular wall is formed of osseous body tissue.

67. An apparatus as set forth in claim 65 wherein said tubular wall is formed of bone.

68. An apparatus as set forth in claim 65 wherein said tubular wall is formed of dense connective body tissue.

69. An apparatus as set forth in claim 65 wherein said tubular wall is formed of dried body tissue which is capable of absorbing body fluid upon insertion into a patient's body.

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70. An apparatus as set forth in claim 65 wherein said outer side surface means has a cylindrical configuration, said inner side surface means has a cylindrical configuration, said outer side surface means having an axial extent of about 2 to 4 mm and a diameter of about 1 to 2 mm, said inner side surface means having a diameter of about $\frac{1}{2}$ to 1 mm.

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